

ABSTRACT

“Echo and crosstalk cancellation”

5 (Fig. 3)

A cancellation system comprises a channel circuit (11) for each noise source, such as echo in a particular cable pair. There are only eighty taps per channel, in two blocks (n_echo_a, f_echo_a). Each block is preceded by a variable delay
10 line comprising blocks of registers cascaded so that a delay value of 0 to 40 clock cycles can be chosen. The delay value is determined by determining an optimum position for each tap block. This is achieved by determining a maximum coefficient sum for a number of windows. Taps from other channels are used during training, so that there is a total of 160 taps for each channel
15 during training to enable the optimum positions to be determined.